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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------|----------------------|----------------------|---------------------------|--|
| 10/692,564 | 10/24/2003 | Jim B. Surjaatmadja | HES 2002-IP-008025U1 | HES 2002-IP-008025U1 9140 | |
| 26232 | 7590 09/11/2006 | EXAMINER | | INER | |
| FISH & RICHARDSON P.C. P.O. BOX 1022 | | | STEPHENSON, DANIEL P | | |
| MINNEAPOLIS, MN 55440-1022 | | | ART UNIT | PAPER NUMBER | |
| | | | 3672 | | |

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|---------------------|--|--|--|--|
| Office Action Summany | 10/692,564 | SURJAATMADJA ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Daniel P. Stephenson | 3672 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 22 Au | Responsive to communication(s) filed on <u>22 August 2006</u> . | | | | | |
| | ., | | | | | |
| | on is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under E | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| Claim(s) <u>1-42</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>5-20 and 24-39</u> is/are | 4a) Of the above claim(s) 5-20 and 24-39 is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-4,21-23 and 40-42</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | ') Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>24 October 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) Other: | | | | | | |

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DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 102 & 35 USC § 103

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-4, 21-23 and 40-42 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over the pre-grant publication '924 to Brown et al. (hereafter Brown et al. '924). Brown et al. '924 (Figure 8, paragraph 5) discloses a downhole fluid separator. It has a housing adapted for connection to a tool string; a cylinder (77) rotatably disposed in the housing and defining a flow passage therein; and a motor disposed in the housing for rotating the cylinder. The fluid flowing through the housing enters the flow passage and is subjected to centrifugal force such that the fluid is separated into different components having different specific gravities. There is a flow conditioner, or impeller, (79) for facilitating the separation of the fluid. The impeller is adjacent to an inlet of the cylinder for

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pumping fluid into the flow passage. In addition, the impeller is attached to the cylinder. As the cylinder is rotated it will impart centrifugal force to whatever fluid is flowing through it. Brown et al. '924 does not explicitly disclose that the separator separates oil and water. However, it is noted in paragraph 5 of Brown et al. '924 that the separator can be used to separate streams where both streams contain liquid. And in paragraph 10 it is disclosed that a fluid of one density is separated from a fluid of another density. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the separator of Brown et al. '924 to separate oil and water as opposed to gas and oil. This would be done because it is common knowledge within the art that separators can be used for both instances.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolpack et al. in view of Cobb. Kolpack et al. (Fig. 1 and 2) discloses a downhole fluid separator. It has a housing (50) adapted for connection to a tool string; a cylinder (58) rotatably disposed in the housing and defining a flow passage (85) therein; and a motor (32) disposed in the housing for rotating the cylinder. The fluid flowing through the housing enters the flow passage and is subjected to centrifugal force such that the fluid is separated into different components having different specific gravities. There is a flow conditioner, or impeller, (56a) for facilitating the separation of the fluid. The impeller is adjacent to an inlet of the cylinder for pumping fluid into the flow passage. In addition, the impeller is attached to the cylinder. As the cylinder is rotated it will impart centrifugal force to whatever fluid is flowing through it. Kolpack et al. does not disclose that the separator separates oil and water. Cobb (col. 1 lines 43-52) discloses that a separator that separates gas and liquid is capable of separating any two fluids with different specific gravities. It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to separate oil and water as taught by Cobb with the apparatus of Kolpack et al. This would be done because it is useful to produce oil while retaining water within the well.

Response to Arguments

6. Applicant's arguments, see page 12 lines 8-19, filed 8/22/06, with respect to the rejection(s) of claim(s) 40-42 under Kolpack et al. in view of Cobb have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Brown et al '924.

It is the assertion of the applicant that this statement of Cobb:

It should be noted, however, that separators are useful not only to separate well liquids and gas, but may also be used in separating any two fluid substances which have different specific gravities.

is not a blanket statement that would allow the use of two fluids instead of a gas and a fluid. The examiner respectfully traverses this assertion. The examiner takes the broad view of the references statements, and reads that it states that <u>any</u> two fluids may be separated that have different specific gravities. It is the opinion of the examiner that if the reference had meant to say that instead of well fluid and gas separation the separator can perform "other liquid" and gas separation it would have stated it as such instead of using the "any two liquids" statement.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Bagnell
Supervisory Patent Examiner

DPSJPS

PRIMARY EXAMINER
TECHNOLOGY CENTER 3600